

Claims:

1. A method for discovering services for a wireless multimode terminal with a plurality of radio interfaces, the method comprising the steps of:
- 5 - in a mobile network, sending an indication to a multimode terminal operably connected to the mobile network, the indication indicating that services may be locally available via at least one short-range wireless network;
- receiving the indication in the multimode terminal;
- based on the indication, collecting service information about services
- 10 for the multimode terminal available through at least one short-range radio interface of the multimode terminal; and
- based on the service information collected, compiling a service list describing at least one service available through the at least one short-range radio interface.
- 15 2. A method according to claim 1, wherein the collecting step includes the steps of:
- attempting to detect at least one of the at least one short-range wireless network through at least one short-range radio interface of the multimode terminal; and
- 20 - gathering the service information through the at least one short-range radio interface.
3. A method according to claim 2, wherein the attempting and gathering steps are performed for one short-range radio interface at a time.
4. A method according to claim 3, further comprising a step of
- 25 controlling the multimode terminal to a power save state with respect to a short-range radio interface after service information is collected through that short-range radio interface or if no network is detected through that short-range radio interface.
5. A method according to claim 2, wherein the attempting step
- 30 includes attempting to detect short-range wireless networks corresponding to all short-range radio interfaces of the multimode terminal.
6. A method according to claim 1, further comprising the steps of:
- storing user preference data in the multimode terminal;
- based on the preference data and the service information collected

in the collecting step, selecting one short-range wireless network; and

- establishing communications with the short-range wireless network selected.

5 7. A method according to claim 1, wherein the indication includes instructive information for the collecting step.

8. A method according to claim 7, wherein the instructive information includes at least one network address.

10 9. A method according to claim 8, wherein the service information is collected through a radio interface by which the multimode terminal is operably connected to the mobile network.

10. A method according to claim 8, wherein the collecting step includes the steps of:

15 - extracting the at least one network address from the indication; and
- gathering the service information based on the at least one network address.

11. A method according to claim 8, wherein the network address is an IP address.

20 12. A method according to claim 7, wherein the instructive information indicates at least one short-range radio interface for each service available locally.

13. A method according to claim 12, wherein the collecting step includes the steps of:

25 - attempting to detect at least one of the at least one short-range wireless network through at least one of the at least one short-range radio interface indicated by the instructive information; and
- gathering the service information through the at least one of the at least one short-range radio interface.

14. A method according to claim 1, further comprising a step of presenting the service list to a user of the multimode terminal.

30 15. A method according to claim 14, wherein the compiling step includes compiling the service list according to user preference data.

16. A method of according to claim 14, wherein the presenting step further includes presenting a required connectivity standard for each of the at least one service.

35 17. A method according to claim 1, wherein the service list includes

service providers corresponding to the at least one service.

18. A method according to claim 14, further comprising a step of querying the user of the multimode terminal if any of the at least one service is to be accessed.

5 19. A method according to claim 1, wherein the sending step includes sending the indication as part of system information sent in the mobile network.

20. A method according to claim 1, further comprising a step of maintaining a service database in the mobile network, the service database including service-related data for the indication.

10 21. A system for discovering services for a wireless multimode terminal, the system including in a mobile network:

 - indication means for sending an indication to a multimode terminal operably connected to the mobile network, the indication indicating that services may be locally available for the multimode terminal via at least one short-range wireless network;

 the system further including in the multimode terminal;

 - a first radio interface with a mobile network and at least one short-range radio interface;

20 - reception means for receiving the indication through the first radio interface;

 - information collection means, responsive to the reception means, for collecting service information about services available via at least one of the at least one short-range wireless network, and

25 - service indication means for compiling a service list based on the service information collected, the service list describing at least one service available via the at least one of the at least one short-range wireless network.

30 22. A system according to claim 21, wherein the information collection means are configured to attempt to detect the at least one of the at least one short-range wireless network in response to the indication.

 23. A system according to claim 21, wherein the indication means are configured to send the indication as system information sent to terminals in the mobile network.

35 24. A system according to claim 21, wherein the indication means are

configured to send instructive information for the information collecting means.

25. A system according to claim **21**, wherein the service list includes information about a connectivity standard for the at least one service.

26. A system according to claim **21**, wherein the information collection means are configured to retrieve the service information from a network address included in the indication.

27. A wireless multimode terminal, the multimode terminal including:

- a first radio interface operably connectable to a mobile network;
- at least one short-range radio interface,
- reception means for receiving an indication through the first radio interface, the indication indicating that services may be locally available for the multimode terminal via at least one short-range wireless network;
- information collection means, responsive to the reception means, for collecting service information about services available via at least one of the at least one short-range wireless network; and
- service indication means for compiling a service list based on the service information collected, the service list describing at least one service available via the at least one of the at least one short-range wireless network.

28. A wireless multimode terminal according to claim **27**, wherein the information collection means are configured to attempt to detect the at least one of the at least one short-range wireless network in response to the indication.

29. A wireless multimode terminal according to claim **28**, wherein the information collection means are configured to activate one short-range radio interface at a time.

30. A wireless multimode terminal according to claim **29**, wherein the information collection means are further configured to control an activated short-range radio interface to a power save state after service information is collected through the activated short-range radio interface or if no network is detected through the activated short-range radio interface.

31. A wireless multimode terminal according to claim **27**, wherein the information collection means are configured to retrieve the service information from a network address included in the indication.